

IN THE CLAIMS

1. (Previously Presented) A plating system comprising:
 - an elongated upper channel formed by two upper shields and an elongated lower channel formed by two lower shields, wherein each channel is separated by a gap between the upper and lower shields, wherein the gap is less than the height of a part being plated, and wherein the shortest distance from the part being plated to a channel wall is less than the shortest distance between the channel wall and an anode; and
 - a plating solution horizontal sparger comprising a series of inlets oriented to direct any plating solution flowing through the inlets directly into one and towards another of the upper and lower channels.
2. (Original) The system of claim 1 further comprising:
 - an anode; and
 - a substantially planar cathode comprising a first surface conductive surface, a second conductive surface, and a perimeter edge, the first conductive surface and second conductive surfaces being substantially parallel to each other and positioned on opposite sides of the cathode; wherein the sparger is positioned at least as close to the perimeter edge of the cathode as to either of the first or second conducting surfaces.
3. (Original) The system of claim 2 wherein the sparger directs any plating solution flowing through the inlets towards the cathode in a plane substantially coplanar with the cathode.

Claims 4-7: Canceled.

8. (Original) The system of claim 1 wherein each of the upper channel and lower channel have a width less than or equal to one inch.
9. (Previously Presented) The system of claim 1 wherein the horizontal sparger

directs any plating solution flowing through the inlets into the lower channel and towards the upper channel.

10. (Original) The system of claim 1 wherein each of the upper channel and lower channel have a width less than or equal to 0.5 inches.
11. (Previously Presented) The system of claim 1 wherein each of the upper channel and lower channel have a width less than or equal to 0.5 inches. and further comprising a plurality of part holding clamps electrically coupled to a power source and positioned within the upper channel or the lower channel.
12. (Original) The system of claim 1 further comprising a plurality of anodes positioned outside and along the length of the upper and lower channels.
13. (Original) The system of claim 1 wherein the upper channel and lower channel are separated by a distance and at least one of the upper channel and lower channel are adapted to be moved to vary the distance.

Claims 14-18: Canceled.

19. (Previously Presented) The system of claim 1, wherein the gap is 20 percent of the height of the part being plated.